Title (en)

METHOD FOR DETERMINING THE QUALITY OF FRUIT AND BERRIES AND APPARATUS FOR SORTING FRUIT AND BERRIES

Title (de)

VERFAHREN ZUR QUALITÄTSBESTIMMUNG VON FRÜCHTEN UND BEEREN UND SORTIERAPPARAT FÜR FRÜCHTEN UND BEEREN

Title (fr)

PROCEDES POUR DETERMINER LA QUALITE DE FRUITS ET DE BAIES ET APPAREIL POUR TRIER FRUITS ET BAIES

Publication

EP 1095263 A1 20010502 (EN)

Application

EP 99931583 A 19990701

Priority

- NL 9900411 W 19990701
- NL 1009556 A 19980703

Abstract (en)

[origin: WO0002036A1] The invention relates to a method for determining the maturity and quality of fruit and berries by measuring the quantity of chlorophyll fluorescence and to an apparatus for sorting fruit and berries. The method is based on determining the quantity of fluorescence by chlorophyll of fruit and berry. The invention comprises causing the chlorophyll molecule to fluoresce by irradiating the fruit and berries with electromagnetic radiation of a suitable wavelength and measuring the degree of fluorescence. Advantages of the method are the very high sensitivity, its being completely non-destructive and the very high speed. These advantages of the invention make it possible to construct a sorter apparatus in which fruit and berries are selected on the basis of the quantity of chlorophyll. Because the intensity of the chlorophyll fluorescence is directly related to the quantity of chlorophyll, it will now be possible to sort fruit and berries as to the stage of ripening and quality.

IPC 1-7

G01N 21/64; B07C 5/342

IPC 8 full level

B07B 13/00 (2006.01); **B07C 5/342** (2006.01); **G01N 21/64** (2006.01); **G01N 33/02** (2006.01)

CPC (source: EP)

B07B 13/00 (2013.01); **B07C 5/342** (2013.01); **G01N 21/64** (2013.01); **G01N 33/025** (2013.01)

Citation (search report)

See references of WO 0002036A1

Cited by

CN110270517A

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

WO 0002036 A1 20000113; AU 4803499 A 20000124; BR 9911822 A 20010327; CA 2337903 A1 20000113; EP 1095263 A1 20010502; NL 1009556 C2 20000107; NZ 509205 A 20030328; PL 345405 A1 20011217

DOCDB simple family (application)

NL 9900411 W 19990701; AU 4803499 A 19990701; BR 9911822 A 19990701; CA 2337903 A 19990701; EP 99931583 A 19990701; NL 1009556 A 19980703; NZ 50920599 A 19990701; PL 34540599 A 19990701